

ABSTRACT OF DISCLOSURE

A system that provides a bimanual user interface in which an input device is provided for each of the users hands, a left hand (LH) device and a right hand (RH) device. The input devices are used in conjunction with a large format, upright, human scale display at which the user can stand and upon which the input devices are moved. The positions of the input devices on the display are marked by displayed cursors. The system detects the position of the input devices relative to the display and draws a vector corresponding to unfastened tape between positions of cursors of the corresponding input devices and pointing from the LH device to the RH device. By changing the state of the LH input device the unfastened tape can be fastened or pinned along the vector as the user moves the LH device toward the RH device. By changing the state of the RH device, the tape can be unfastened by moving the LH device away from the RH device. Straight lines are drawn by holding the RH fixed while the LH pins the tape. Curves are drawn by moving the RH device while the LH device pins the tape. The switch between straight and curved lines occurs without an explicit mode switch simply by keeping the RH device fixed or moving it. The radius of the curvature of curved lines corresponds to the separation between the LH and RH devices. The RH device can also be used to cut the tape and remove it from the display.